

Abstract 408

TITLE: The Impact of Tuberculosis in the Epidemiology and Clinical Presentation of HIV Disease

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ISSUE: To characterize the impact that tuberculosis (TB) has in the epidemiology and clinical presentation of HIV disease.

SETTING: Miami-Dade County, a metropolitan area with a high incidence and prevalence of HIV disease, with 21,642 AIDS cases reported up to December 1998 (45%, or 9,665 cases, have been seen at University of Miami/Jackson Memorial Hospital). Miami-Dade County also has a high TB case rate (14.6 per 100,000), almost double the national average (8.0 per 100,000). Immigration from the Caribbean and Latin America is a particular phenomenon in our area.

PROJECT: Review of surveillance database for Miami-Dade County. Comparison of characteristics of patients with AIDS and patients dually infected with TB/AIDS.

RESULTS: Dual infection (TB/AIDS) was more frequent among blacks and Haitians. Together, they accounted for 73% of the cases of TB/AIDS in Miami-Dade County. In comparison, blacks and Haitians represented 47% of AIDS cases without TB. Intravenous drug use (IDU) was the most common mode of exposure in patients with TB/AIDS. A higher incidence rate was found among black women and IDUs. When current status was analyzed, we found a higher mortality reported in patients with TB/AIDS (66%) compared with AIDS cases without TB (57%). This was true for all ethnic groups except Haitians. Statistical analysis demonstrated a 28% decrease in the relative risk of subsequent diagnosis of *Mycobacterium avium* complex infection in patients with pulmonary TB ($p < 0.05$). Patients dually infected with TB/AIDS also had a lower frequency of Kaposi's sarcoma, wasting syndrome and CD4 immunodeficiency.

LESSONS LEARNED: Tuberculosis changes the epidemiology and clinical presentation of HIV disease. Minorities (blacks and Haitians in our case) are most affected. IDU is a common mode of exposure in patients with TB/AIDS, especially in black women. TB appears to have a negative impact in mortality. Patients born in countries of high prevalence for TB demonstrated a lower mortality. TB infection may confer some degree of immunity against subsequent infection with *Mycobacterium avium* complex.

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